

AMENDMENTS TO THE CLAIMS

The following listing of claims will replace all prior versions and listings of claims in the application.

LISTING OF CLAIMS

1 – 23. (Cancelled)

24. (Currently Amended) A moldable resin for use in a molding process to form a molded part at least partially therefrom, the moldable resin comprising:

a base resin;

a plurality of shape memory alloy (SMA) particles interspersed in said base resin while in their austenitic state; and

wherein said SMA particles are suspended in said base resin and serve to enhance a specific property of said base resin.

25. (Currently Amended) The moldable resin of claim 24, wherein said SMA particles comprise ~~NITINOL[®]~~ nickel-titanium alloy particles.

26. (Previously Presented) The moldable resin of claim 24, wherein said SMA particles are less than about 1% of a total volume of said resin.

27. (Previously Presented) The moldable resin of claim 24, wherein said SMA particles comprise between about 1% and 50% by volume of said resin.

28. (Previously Presented) The moldable resin of claim 24, wherein said SMA particles comprise at least about 50% by volume of said resin.

29. – 30. (Cancelled)

31. (Currently Amended) The moldable resin of claim 24, wherein said SMA particles further comprise ~~a mixture of SMA particles in a martensitic phase and austenitic phases.~~

32. (Previously Presented) The moldable resin of claim 24, wherein said base resin comprises a thermoplastic resin.

33. (Previously Presented) The moldable resin of claim 24, wherein said base resin comprises a thermosetting resin.

34. (Previously Presented) The moldable resin of claim 24, wherein said resin is suitable for use in injection molding and compression molding processes.

35. (Previously Presented) The moldable resin of claim 24, wherein said SMA particles are formed in at least one of the group of shapes comprising: spherical, cylindrical and oval.

36. (Previously Presented) The moldable resin of claim 24, wherein said SMA particles comprise granules intermixed within said base resin.

37. (Previously Presented) The moldable resin of claim 24, wherein said SMA particles comprise a size of between about 0.005 micron to about 50 micron.

38. (Previously Presented) The moldable resin of claim 24, wherein said SMA particles comprise a size of at least about 50 microns.

39. (Previously Presented) The moldable resin of claim 24, wherein said SMA particles comprise a size of no more than about 0.005 micron.

40. (Currently Amended) A moldable resin for use in an injection molding process to make an injection molded part, the moldable resin comprising:

a base resin comprised of one of a thermoplastic or thermosetting plastic resin; and
a plurality of shape memory alloy (SMA) particles added to the base resin while in their austenitic state to enhance a property of said base resin.

41. – 42. (Cancelled)

43. (Currently Amended) The moldable resin of claim 40, wherein said SMA particles comprise NITINOL[®] –nickel-titanium alloy particles.

44. (Previously Presented) The moldable resin of claim 40, wherein said SMA particles comprise less than about 1.0% by volume of said resin.

45. (Previously Presented) The moldable resin of claim 40, wherein said SMA particles comprise between about 1.0% to about 50% by volume of said resin.

46. (Currently Amended) A moldable resin for use in a compression molding process to make a compression molded part, the moldable resin comprising:

a base resin comprised of one of a thermoplastic or thermosetting plastic resin; and
a plurality of shape memory alloy (SMA) particles added to the base resin while in their austenitic state to enhance a property of said base resin without affecting a moldability of said base resin.

47. (Currently Amended) The moldable resin of claim 46, wherein said SMA particles comprise NITINOL[®] nickel-titanium alloy particles.

48. - 49. (Cancelled)

50. (Previously Presented) The moldable resin of claim 46, wherein said SMA particles comprise a shape in accordance with one of the group of shapes comprising: oval, spherical and cylindrical.

51. (Previously Presented) The moldable resin of claim 46, wherein said SMA particles comprise granules added to said base resin.